

In the Specification:

(REFERRING TO THE LINE NUMBERS PRINTED IN THE LEFT MARGIN)

Please add a new heading at page 1, above line 1, as follows:

TITLE OF THE INVENTION

Please add a new heading at page 1, above line 4, as follows:

FIELD OF THE INVENTION

Please replace the paragraph at page 1, lines 4 to 7, with a replacement paragraph amended as follows:

The invention relates to a method for operating an electronic module which is supplied with electrical energy by a voltage source ~~according to the preamble of patent claim 1.~~ source.

Please add a new heading at page 1, above line 9, as follows:

BACKGROUND INFORMATION

Please replace the paragraph at page 1, line 23 to page 2, line 10, with a replacement paragraph amended as follows:

Fig. 2 shows a simplified block diagram of this known electronic module, which is composed of an up-converter 1, a down-converter 2 which is series-connected to the up-converter 1 and a power module 3 connected to the down-converter 2, these functional units being controlled by a microprocessor  $\mu$ C. The power module 3 on its part triggers a security unit 4, as for example an airbag, a

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seat belt tensioner or a roll-over bar. Via an ignition switch  $S_2$  the up-converter 1 is supplied with an operating voltage source, which is as a rule the battery voltage  $U_{Bat.}$  ~~voltage  $U_{bat.}$~~ . A system-autonomous capacitor  $C_s$  connected to the connection line of the two voltage converters 1 and 2 serves for bridging the voltage interruption in the event of a battery voltage failure, e.g. with an accident entailing the functional deficiency of the vehicle battery. For this purpose, said system-autonomous capacitor  $C_s$  is charged by the up-converter 1 to a value lying above the battery voltage  $U_{Bat.}$  ~~voltage  $U_{bat.}$~~ . A further capacitor namely a function-autonomous capacitor  $C_z$ , connected to the output of the down-converter 2, particularly serves as an ignition-autonomous capacitor, to likewise ensure the ignition energy for the pyrotechnic triggering of a security unit 4 in the event of an operating voltage failure.

Please replace the paragraph at page 2, lines 13 to 16, with a replacement paragraph amended as follows:

The ~~advantage~~ disadvantage of this known electronic module is that a complex method is necessary for charging both the system-autonomous capacitor and the function-autonomous capacitor ~~a complex method is necessary.~~ capacitor.

Please add a new heading at page 2, above line 18, as follows:

SUMMARY OF THE INVENTION

Please **replace** the paragraph at **page 2, line 23 to page 3, line 3**, with a replacement paragraph amended as follows:

This object is achieved by the features of ~~patent claim 1.~~  
the invention. Accordingly, the function-autonomous capacitor is connected both to the voltage converter and to the system-autonomous capacitor by means of a charging circuit or charging connection, said charging connection being controllable in order to fulfill various functions in different operating states. For charging the two autonomous capacitors, i.e. in particular during the starting phase of the electronic module, the charging connection is controlled in a switching mode for clocking the charging current. In contrast, both for testing or checking the system-autonomous capacitor and for producing a re-charging or re-loading current for ~~re-loading~~ re-charging the function-autonomous capacitor, the charging connection is operated as a controllable resistance, i.e. as a current source for producing a constant discharging current.

Please **add** a new heading at **page 3, above line 33**, as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

Please **replace** the paragraph at **page 3, lines 33 to 35**, with a replacement paragraph amended as follows:

The method according to the invention shall be described and shown ~~on the basis of~~ in connection with an example

~~[[of]]~~ embodiment ~~taken in conjunction with Fig. 1.~~ with reference to the drawings, wherein:

Fig. 1 shows an example embodiment of a circuit arrangement for carrying out an example embodiment of the method according to the invention; and

Fig. 2 shows a circuit arrangement according to the prior art.

Please **replace** the paragraph at **page 4, lines 1 to 18**, with a replacement paragraph amended as follows:

Here, Fig. 1 shows a block diagram of a control circuit 10 for vehicle collision safety devices or security units 4, such as airbags, seat belt tensioners, belt load limiters and roll-over bars in motor vehicles. This control circuit contains an up-converter 1, which via an ignition switch  $S_z$  is connected to an operating voltage source, for example the vehicle battery, by means of ~~[[the]]~~ a terminal ~~[[157]]~~ to be supplied with an operating voltage  $U_{sat}$  of e.g. 24V. From this ~~[[said]]~~ operating voltage, the up-converter 1 produces a higher operating voltage ~~lying above it~~  $U_s$  of e.g. 48V, with which a system-autonomous capacitor  $C_s$  is ~~charged~~ charged, and simultaneously with this operating voltage  $U_s$  a charging connection 5 and a down-converter 2 is supplied. This down-converter 2 produces from the operating voltage  $U_s$  for example an operating voltage  $U_{\mu C}$  for ~~[[both]]~~ a microprocessor  $\mu C$  and operating voltages  $U_{sat}$  for

further modules, e.g. sensor groups, in particular for side-crash-recognition.

Please **replace** the paragraph at **page 4, lines 20 to 35**, with a replacement paragraph amended as follows:

The charging ~~current~~ circuit 5 substantially shows only the most important elements, namely a series pass transistor T, whose collector electrode is connected to the operating voltage  $U_s$ , whose source electrode is applied via a resistance R to the output of this charging ~~connection~~ circuit 5 and is connected directly to an ignition-autonomous capacitor  $C_z$  and an ignition power module 3 for triggering a security unit 4. Simultaneously, current sources 6 and ~~[[7]]~~ 7, whose functions are described below, are supplied by this charging circuit or connection 5. ~~5, whose functions are described below~~. The ignition-autonomous capacitor  $C_z$  is charged by the charging connection 5 to a voltage  $U_{zund}$  and in the event of operating voltage interruptions provides the ignition energy in the event of the triggering of a security unit 4 via their allocated ignition power module 3.

Please **replace** the paragraph at **page 7, lines 8 to 18**, with a replacement paragraph amended as follows:

The exemplary control circuit 10 according to Fig. 1 shows only a single ignition power module ~~[[2]]~~ 3 with a security unit 4. As needed, ~~in case of need~~, of course, several ignition power modules with a respectively allocated

security unit can be connected to the output of the charging connection 5 and the ignition-autonomous capacitor C<sub>2</sub> ~~[[resp-]]~~ respectively. Furthermore, it is also possible that one ignition power module each with allocated security unit is supplied by a charging connection each with separated ignition-autonomous capacitor.

**[RESPONSE CONTINUES ON NEXT PAGE]**

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